

What is claimed is:

1. A method for scoring a severity of sensed neurological signals relating to a nervous system disorder comprising the steps of:

- (a) receiving from a monitoring element a neurological signal having at least one event to be scored;
- (b) identifying at least one feature of the neurological signal to use in scoring;
- (c) computing a score of relative severity of the event using the identified feature ; and
- (d) ranking the event by severity relative to at least one other scored event.

2. A method of claim 1 wherein the step of receiving comprises the step of receiving a neurological signal having an event selected from the group consisting of a detected event, a detection cluster event, and a reported event.

3. A method of claim 1 wherein the step of identifying at least one feature comprises the step of identifying a feature selected from the group consisting of a maximum ratio, a duration of a seizure detection, and a spread, number of clusters per unit time, number of detections within a cluster, duration of an event cluster, duration of a detection, and an inter-seizure interval.

4. A method of claim 1, further comprising the step of (e) communicating the ranked events to an external device.

5. A method of claim 1, further comprising the step of (e) displaying the ranked events.

6. A method of claim 1, wherein the step of ranking is performed by at least one device selected from the group consisting of an external device and an implanted device.

7. A method of claim 1, wherein the step of identifying is performed using algorithm-based measures of activity of the nervous system disorder.

8. A method of claim 5, wherein the nervous system disorder is a seizure and the step of computing is performed relating duration, intensity, and extent of electrographic spread of the nervous system disorder.

9. A method of claim 1, wherein the step of computing comprises the step of allowing a user to exclude a certain event from being scored.

10. A method of claim 1 wherein the feature is selected from the group consisting of maximal intensity of the event, number of monitoring elements involved in the event, number of clusters per unit time, number of detections within a cluster, duration of an event cluster, duration of a detection, and an inter-seizure interval.

11. A method of claim 1, wherein the step of computing comprises the step of computing a relative severity minimum, in which the lowest relative severity score associated with clinical manifestations or other behaviors indicative of a nervous system disorder activity may be used to minimize a probability of missing clinical events.

12. A method of claim 1, wherein the step of receiving comprises the step of receiving the neurological signal selected from the group consisting of an electrical signal, a chemical signal, a biological signal, a temperature signal, a pressure signal, a respiration signal, a heart rate signal, a ph-level signal, and a peripheral nerve signal.

13. A method of claim 1, wherein the step of receiving comprises the step of receiving the signal from the monitoring element selected from the group consisting of an electrode and a sensor.

14. A method of claim 1, wherein the nervous system disorder is selected from the group consisting of a central nervous system disorder, a peripheral nervous system disorder, and mental health disorder and psychiatric disorder.

15. A medical device system capable of scoring a severity of sensed neurological signals relating to a nervous system disorder comprising in combination:

(a) at least one monitoring element, each generating a neurological signal of a sensed neurological condition; and

(b) computer executable instructions for performing the steps of (i) identifying at least one feature of the neurological signal to use in scoring; (ii) computing a score of relative severity of the event using the identified feature; and (iii) ranking the event by severity relative to at least one other scored event.

16. A medical device system of claim 15, wherein the monitoring element generates a neurological signal having an event selected from the group consisting of a detected event, a detection cluster event, and a reported event.

17. A medical device system of claim 15, wherein the step of identifying at least one feature comprises the step of identifying a feature selected from the group consisting of a maximum ratio, a duration of a seizure detection, and a spread, number of clusters per unit time, number of detections within a cluster, duration of an event cluster, duration of a detection, and an inter-seizure interval.

18. A medical device system of claim 15, wherein the computer executable instructions further performs the step of (iv) communicating the ranked events to an external device.

19. A medical device system of claim 15, wherein the computer executable instructions further performs the step of (iv) displaying the ranked events.

20. A medical device system of claim 15, wherein the step of ranking is performed by at least one device selected from the group consisting of an external device and an implanted device.

21. A medical device system of claim 15, wherein the step of identifying is performed using algorithm-based measures of activity of the nervous system disorder.

22. A medical device system of claim 21, wherein the nervous system disorder is a seizure and the step of computing is performed relating duration, intensity, and extent of electrographic spread of the nervous system disorder.

23. A medical device system of claim 15, wherein the step of computing comprises the step of allowing a user to exclude a certain event from being scored.

24. A medical device system of claim 15, wherein the feature is selected from the group consisting of maximal intensity of the event, number of monitoring elements involved in the event, number of clusters per unit time, number of detections within a cluster, duration of an event cluster, duration of a detection, and an inter-seizure interval.

25. A medical device system of claim 15, wherein the step of computing comprises the step of computing a relative severity minimum, in which the lowest relative severity score associated with clinical manifestations or other behaviors indicative of a nervous system disorder activity may be used to minimize a probability of missing clinical events.

26. A medical device system of claim 15, wherein the step of receiving comprises the step of receiving the neurological signal selected from the group consisting of an electrical signal, a chemical signal, a biological signal, a temperature signal, a pressure signal, a respiration signal, a heart rate signal, a ph-level signal, and a peripheral nerve signal.

27. A medical device system of claim 15, wherein the step of receiving comprises the step of receiving the signal from the monitoring element selected from the group consisting of an electrode and a sensor.

28. A medical device system of claim 15, wherein the nervous system disorder is selected from the group consisting of a central nervous system disorder, a peripheral nervous system disorder, and mental health disorder and psychiatric disorder.

29. A medical device system of claim 15, wherein the monitoring element is selected from the group consisting of an electrode and a sensor.

30. A medical device system of claim 15, wherein the computer executable instructions are within an implanted device.

31. A medical device system of claim 15, wherein the computer executable instructions are within an external device.

32. A medical device system of claim 15, further comprising (c) an external device having a display for displaying the ranked events.